



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759,425	01/12/2001	Bart F. Rice	088245-3389	2323
23524	7590	04/14/2009	EXAMINER	
FOLEY & LARDNER LLP			AUGUSTIN, EVENS J	
150 EAST GILMAN STREET				
P.O. BOX 1497			ART UNIT	PAPER NUMBER
MADISON, WI 53701-1497			3621	
			MAIL DATE	DELIVERY MODE
			04/14/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/759,425	RICE, BART F.	
	Examiner	Art Unit	
	EVENS J. AUGUSTIN	3621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 23 January 2009.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 105-134 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 105-134 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) Notice of Informal Patent Application

6) Other: _____.

Detailed Action

Acknowledgment

1. Request for Continued Examination under 37 CFR1.114, filed on 01/23/2009, has been acknowledged. Claims 105-134 have been added and have been examined.

Claim Rejections - 35 USC §101

1. 35 U.S.C. §101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 125-134 are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter.
3. Based on Supreme Court precedent¹ and recent Federal Circuit decisions, § 101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing.² If neither of these requirements is met by the claim(s), the method is not a patent eligible process under 35 U.S.C. § 101.
4. In this particular case, claim 125 is not tied to any particular apparatus. Therefore, it is not a patent eligible process under 35 U.S.C. § 101.

¹ *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

² The Supreme Court recognized that this test is not necessarily fixed or permanent and may evolve with technological advances. *Gottschalk v. Benson*, 409 U.S. 63, 71 (1972).

5. With regard to claims 105-124, those claims would be allowable if applicant amends claim 105 to exclude intended use language (i.e., “sequence generator generating a Gold code...”). Otherwise the 102 rejection is maintained.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States. . . .

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 78-104 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee (U.S. 4607375).

4. As per claims 78-104, Lee discloses an invention comprising of the following:

A. storing portions of code sequence (Column 2 (C), Lines (L) 39-40), the code sequence being selected to spread the binary signal over as large a bandwidth as possible (C1, L43-45);

B. Modulating waveform by portions of the code sequence (emphasis on the plurality) (C1, L64-65), to thereby provide a frequency hopping carrier frequency for the

transmitted portions of the PN sequence and the transmitted complements of the portions of the PN sequences (C2, L24-27) – The signal is an RF (Radio Frequency) signal (C12, L3-4) – Radio signals are part of the electromagnetic spectrum (see U.S. 4423419, C1, L46-55 Note: this reference is to show that radio signals are part of the electromagnetic wave spectrum);

- C. Each subset correspond to a node (device) (figure 8);
- D. Each information bit represent a sequence (C5, L18-19) - at least one subset of the selected subsets contains a plurality of the binary spreading- code sequences (C6, L56-58);
- E. -- sequence can be divided into N sections or portions and each section or portion represents one information bit (C6, L56-58);
- F. The codes are of a given length (C5, L30-40);
- G. Each subset correspond to a node (device) (figure 8);
- H. -- a pair of shift registers coupled to the second memory to store the received portions of the PN sequences and the received complement of the portions of the PN sequences (C2, L 33-36);
- I. bit stream is divided into half (C11, L34-35);
- J. ("portions of the PN sequence are transmitted at a first carrier frequency and the next portions of the PN sequences are transmitted at a second carrier frequency (C7, L15-20) – signals are 90 degrees out of phase (C9, L64);
- K. **With regard to claims 89-91 and 102-104,** the prior art shows ("166 MHz bandwidth is divided into eight 20.7 MHz sub-bands using eight carrier frequencies,

namely, 200 MHz, 400 MHz, 600 MHz, 800 MHz, 1 GHz, 1.2 GHz, 1.4 GHz and 1.6 GHz to carry these eight sub-bands, one for each carrier. The implementation of such an arrangement actually consists of eight single spread spectrum (C10, L50-56);

L. Modulator – (C1, L60, fig. 3, item 10);

Conclusion

5. In determining patentability of an invention over the prior art, the USPTO has considered all claimed limitations, and interpreted as broadly as their terms reasonably allow. Additionally, all words in the claims have been considered in judging the patentability of the claims against the prior art.
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to EVENS J. AUGUSTIN whose telephone number is 571-272-6860. The examiner can normally be reached on 10am - 6pm M-F.
7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Fischer can be reached on (571)272-6779.

/Evens J. Augustin/

Evens J. Augustin

April 14, 2009

Art Unit 3621